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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,447	01/12/2004	Theodore Carter Briggs	200313955-1	2124

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EXAMINER	
CHASE, SHELLY A	

ART UNIT	PAPER NUMBER
2133	

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/756,447	BRIGGS ET AL.	
	Examiner	Art Unit	
	Shelly A. Chase	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *9-15* is/are allowed.

6)☒ Claim(s) *1,2,5,6 and 16-19* is/are rejected.

7)☒ Claim(s) *3,4,7 and 8* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

SHELLY CHASE
PRIMARY EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 to 19 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims **1, 2, 5, 6** and **16** to **19** are rejected under 35 U.S.C. 102(b) as being anticipated by Saxena (USP 5734664).

Claims **1** and **16**:

Saxena teaches a method and an apparatus for storing error codes wherein a memory apparatus includes sixteen eight bit wide, 4 megabit addressable memory devices, the method comprising: a step of storing in addressable memory devices data for use by a computer system (see col. 3, lines 60 to 64), which reads on "receiving a code word for storage in the memory system." Saxena teaches a step of using an error code that corresponds to a device width equal to the width of the device utilized (see col. 3, lines 65 to 68), which reads on "partitioning the codeword into a plurality of nibbles corresponding to widths of the plurality of memory devices." Saxena also teaches that each memory device stores two four bit wide nibbles in each half (see col. 4, lines 3 to 10).

Saxena further teaches that an error correction code is generated with a width equal to the number of bits from a single data word, which is stored in the memory device wherein each memory device stores 4 bits from the data word (see col. 4, lines 28 to 35), which reads on "storing the code word into the plurality of memory devices by storing a plurality of successive nibbles pf the block of data into each of the plurality of memory devices."

As per claim **2**, Saxena teaches that the memory devices stores two 64-bit data words (see col. 6, lines 25 to 30) and that upon retrieval, the data words and check bits are used to produce verification bits through an exclusive OR operation (see col. 5, lines 25 to 37).

Claims **5**, **17** and **19**:

Saxena teaches a method and an apparatus for storing error codes wherein a memory apparatus includes sixteen eight bit wide, 4 megabit addressable memory devices, the method and apparatus comprising: a step of storing in addressable memory devices two 64 bit data word ("chunks") (192 & 194) in nibbles where the data word is stored in groups of bits having a size equal to four or a multiple of four (see col. 4, lines 2 to 27). Saxena teaches that the system simultaneously store and retrieve the two 64 bit data words ("reading a plurality of chunks of data from the plurality of memory devices") (see col. 4, lines 20 to 23).

Saxena also teaches that an error correction code is generated with a width equal to the number of bits from a single data word, which is stored in the memory

devices wherein each memory device stores 4 bits from the data word (see col. 4, lines 28 to 35), which reads on "combining the nibbles from the plurality of chunks to generate a code word where the nibbles from each of the plurality of memory devices are adjacent in the code word." Saxena further teaches that upon retrieval, the data bits and check bits are used by verifiers to produce verification bits (see col. 5, lines 33 to 37).

As per claim **6**, Saxena teaches that the method includes data words and that the stored data word and error code are used to produce verification bits (see 5, lines 30 to 36).

Claim **18**

Saxena teaches a method and an apparatus for storing error codes wherein a memory apparatus includes sixteen eight bit wide, 4 megabit addressable memory devices, the method comprising: a step of storing in addressable memory devices ("first means") data for use by a computer system (see col. 3, lines 60 to 64). Saxena teaches a step of using an error code that corresponds to a device width equal to the width of the device utilized (see col. 3, lines 65 to 68) and that an error correction code generator ("second means") generates error correction code that has a width equal to the number of bits from a single data word, which is stored in the memory device wherein each memory device stores 4 bits from the data word (see col. 4, lines 28 to 35). Saxena further teaches that the plurality of memory devices (third means") stores the error correction code in each nibble (see col. 5, lines 25 to 36).

Allowable Subject Matter

4. Claims 3, 4, 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 9 to 15 are allowed.

6. The following is a statement of reasons for the indication of allowable subject matter: the primary reason for the allowance of the claims is the inclusion of the limitation of "partitioning the nibbles into of groups of M adjacent nibbles wherein M is a value equaling CW divided by MD..." The prior art made of record teaches storing a plurality of data words in nibbles equaling the width of the memory devices as stated in the rejection above; however, the prior art made of record fails to teach or fairly suggest the novel element of the instant invention.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelly A. Chase whose telephone number is 571-272-3816. The examiner can normally be reached on Mon-Thur from 8:00 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SHELLY CHASE
PRIMARY EXAMINER